**Organic and Electrochemistry Review**

1. What are 3 things in your daily life that are organic chemicals?
2. What elements make up hydrocarbons?
3. What is the general formula for an alkane?
4. Complete the chart below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Formula** | **Structural Diagram** | **Line Diagram** |
| propane |  |  |  |
|  | C5H12 |  |  |
|  |  |  |  |
|  |  |  |  |

1. What is the difference between an alkane, alkene and alkyne with respect to the types of bonds between carbons.
2. What functional group is in each of the following types of compounds?
3. Name the following.

|  |  |
| --- | --- |
| **Structure** | **Name** |
|  |  |
|  |  |
|  |  |
|  |  |

1. Draw line and structural diagrams for the following.

|  |  |  |
| --- | --- | --- |
| **Name** | **Line Diagram** | **Structural Diagram** |
| 2-bromo-3-ethylhexane |  |  |
| 2-chloropent-2-ene |  |  |
| 2,3-dimethylhept-4-yne |  |  |
| 1-amino-2-nitrobut-2-ene |  |  |

1. What are the products of complete combustion?
2. What are the problems associated with incomplete combustion?
3. What compounds are used as artificial scents and flavours? How are they made?
4. What is a polymer?
5. Distinguish between natural and synthetic polymers? Give 2 examples of each.
6. Complete the following reactions by structural diagrams of all reactants and products. Also indicate the type of reaction.
7. hex-2-ene + H2O 🡪

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. propene + Cl2 🡪

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. In the reactions below identify which substance loses electrons and which substance gains.
2. Cu + 2 Ag+ 🡪 Cu2+ + 2 Ag
3. Fe + Cu2+ 🡪 Fe2+ + Cu
4. When a nail is galvanized what metal is it coated with?
5. What is corrosion? Give 2 ways to prevent corrosion. Explain each method.
6. When using a burner what colour of flame do you want? Give 2 reasons why.